sparsely hispidulous; only female flowers seen, 6--12 in umbelloid racemes at the ends of short (6--13 mm. long) simple peduncles; pedicels up to about 1.5 mm. long, articulate near the apex; calyx campanulate, about 2.5 mm. long, glabrescent or sparsely pubescent outside, glabrous inside, the calyx-lobes reflexed, rounded, about 1.5 mm. long and slightly broader, pubescent on the inner surface and with a tuft of hairs at the apex; staminodes and rudimentary petals none; ovary glabrous, about 1.5 mm. long; style 0.8 mm. long; stigms capitate and densely papillose, exserted from the calyx; disk conspicuous, crateriform, oblique, irregularly lobed, glabrous.

Type: Reinaldo Espinosa 205, collected at Namanola, alt. 2400-2500 m., southern Loja, Ecuador, April 18, 1946, deposited in the Britton Herbarium at the New York Botanical Garden. The type specimen consists of young leaves and flowers. The following matured flowering specimen has also been examined: Reinaldo Espinosa s.n. [Herb. Krukoff 19848] from the type locality, received in February, 1947.

Daphnopsis Espinosae has affinity with D. zamorensis

Daphnopsis Espinosae has affinity with D. zamorensis
Domke, the type of which was collected at Zamora, Loja. D.
zamorensis, however, is described as having leaves about 18
to 27 cm. long and 5.5 to 8 cm. broad, petioles 1 to 1.5 cm.
long and 0.3 to 0.4 cm. broad, and inflorescences 8 cm.
long. The much smaller leaf and inflorescence size of D.
Espinosae is an obvious means of distinguishing it from D.
zamorensis. From other species found in Ecuador and Feru -D. loranthifolia, D. caribaea var. ecuadoriensis, D. caribaea var. peruviensis, D. Weberbaueri, and D. Pavonii -- the
present species is easily distinguished by its entirely
glabrous leaves and by other characters.

NOTES ON NEW AND NOTEWORTHY PLANTS. I

Harold N. Moldenke

The present paper is the first in a series of notes on plants of various parts of the world, based in part on field studies and in part on herbarium studies in the herbarium of the New York Botanical Garden and elsewhere. Numerous new species, varieties, forms, and hybrids will be described and several new names and combinations proposed. Abbreviations used herein for the names of herbaria in which cited specimens are deposited are in conformity with my previous publications, but for the convenience of

the readers of the present paper the ones herein used are as follows: Al = New York State Museum, Albany; Ba = Bailey Hortorium. Ithaca; Bc = Barnard College Herbarium, New York Botanical Garden, New York City; Bt = Butler University, Indianapolis; Bu = Buswell Herbarium, University of Miami, Coral Gables; C = Columbia University Herbarium, New York Botanical Garden, New York City; Cm = Carnegie Museum, Fittsburgh; Dm = C. C. Deam Herbarium, Bluffton. Indiana; Dp = De Pauw University, Greencastle; Du = Dudley Herbarium, Stanford University, California; Fc = Colorado Agricultural & Mechanical College, Fort Collins; Fl = University of Florida, Gainesville; Go = Botaniska Tradgard, Goteborg, Sweden; H = Duke University, Durham; Hp = H. Hapeman Herbarium, Minden, Nebraska; Hs = Crispus Attucks High School, Indianapolis; I = Langlois Herbarium, Catholic University of America. Washington; Io = Iowa State College, Ames; It = Cornell University, Ithaca; Mi = University of Michigan, Ann Arbor; N = Britton Herbarium, New York Botanical Garden, New York City; Pl = State College of Washington, Pullman; Po = Pomona College, Claremont, California; St = Oklahoma Agricultural & Mechanical College, Stillwater; T = Torrey Herbarium, New York Botanical Garden, New York City; Ua - Utah State Agricultural College, Logan; Up - University of Pennsylvania, Philadelphia; Ur - University of Illinois, Urbana; Vt = University of Vermont. Burlington; and We = West Virginia University, Morgantown.

AEGIPHILA HOEHNEI var. PUYENSIS Moldenke, var. nov.

Haec varietas a forma typica speciei pilis ramorum ramulorumque atrobrunneis rigide patentibus et pilis foliorum non bulbosis recedit.

This variety differs from the typical form of the species in the pubescence on its branches and branchlets being dark brownish and stiffly wide-spreading and that of the upper leaf-surfaces not being bulbous-based.

The variety is described as a woody vine about 3 m. long, with off-white flowers, and war collected by W. C. Steere and W. H. Camp (no. 8283) at an altitude of 3000 feet in the vicinity of Puyo, Parroquia Puyo, Oriente, Ecuador, on May 12, 1944, and is deposited in the herbarium of the Chicago Museum of Natural History.

ANASTRAPHIA RECURVA var. INTEGRIFOLIA Moldenke, var. nov. Haec varietas a forma typica speciei foliis integris recedit.

This variety differs from the typical form of the species in having all its leaves entire-margined.

The type was collected by Julia Acuña Gale (no. 12780) at Río Yagrumajes, Moa, Oriente, Cuba, on April 14, 1945, and

is deposited in the herbarium of the Estacion Experimental Agronomica at Santiago de las Vegas, Havana, Cuba.

CALPIDISCA LUNDII (A. DC.) Moldenke, comb. nov. Utricularia Lundii A. DC., Prodr. 8: 14. 1844.

CALYPTRANTHES CAROLI var. LONGIPEDUNCULATA Moldenke, var.

Haec varietas a forma typica speciei pedunculis 1.5--3 cm. longis ebracteatis recedit.

This variety differs from the typical form of the species in having peduncles 1.5 to 3 cm. long, without any leaf-like

bracts at its apex.

The type was collected by Brother León and Juan T. Roig (no. 13544) at Loma Pelada, Cayajabos, Pinar del Río, Cuba, on August 10, 1928, and is deposited in the Britton Herbarium at the New York Botanical Garden.

CISSAMPELOS LAXIFLORA Moldenke, sp. nov.

Fruticulus scandene; ramis gracilibus sulcato-striatis adpresso-pilosis; laminis foliorum leviter chartaceis in siccitate atrobrunneis vel nigrescentibus supra nitidis non peltatis late ovatis acuminatis mucronatis, ad basin truncatis vel subtruncatis, integris supra glabris subtus

minute adpresso-pilosulis.

Small vine; stems twining, slender, longitudinally sulcate-striate with many narrow striae, more or less appressed-pilose; principal internodes 3.5--7 cm. long; leaf-blades thin-chartaceous, dark-brown or nigrescent and shiny above in drying, lighter beneath, not peltate, broadly ovate, 5--8.5 cm. long, 3.5--7.5 cm. wide, acuminate at the apex, the acumination attenuate into a mucro about 3 mm. long, truncate or subtruncate at the base, entire, sometimes irregularly angulate at the widest part, glabrous above, minutely appressed-pilosulous beneath; principal veins 5, issuing from the very base of the blade, along with the secondaries and tertiaries slightly prominulous on both surfaces; staminate inflorescence axillary, 1 or 2 per axil, pedunculate, paniculate-racemose; peduncles straight, slender, 1--1.5 cm. long; rachis straight, erect, slender, 5--10 cm. long, appressed-pilose; branches filiform, usually less than 1 cm. long, spreading, pilose; bracts absent or very minute; pistillate flowers: sepal 1, thick, ovate-elliptic, about 1.6 mm. long and equally wide if pressed flat, very convex on the outer and concave on the inner surface, enfolding the remainder of the flower, rounded at apex and base, glabrous on both surfaces; petal 1, on the same side and in front of the sepal, broadly obovate-orbicular, lighter textured than the sepal and lighter in color, about 1 mm. long and wide,

rounded at apex and base, glabrous on both surfaces; pistil 1, about 1.2 mm. long, glabrate; style obsolete; stigmas 3, about 0.3 mm. long, spreading, acute; steminate flowers: sepals 4. membranous, elliptic, about 0.6 mm. long and 0.4 mm. wide, subacute at apex, narrowed at base, glabrous, very fragile; petals 4, connate; stamens 4, connate; pistillate inflorescence axillary, racemose, simple or paniculately branched. one per axil; bracts foliaceous, orbicular-ovate, 5--15 mm. long, 3--11 mm. wide, long-mucronate at apex, long-stalked at base; rachis slender, 12--18 cm. long, bearing the flowers in fascicles at intervals of 5--10 mm., the branches (if any) few and wide-spreading; fruiting racemes with 1--4 fruits in a cluster, their pedicels 10--15 mm. long, the clusters 1--1.5 cm. apart, the rachis very slender, the bracts persistent but only one subtending each cluster of fruit and therefore widely separated; fruit pyriform, about 6 mm. long and 4 mm. wide, minutely pilosulous or glabrate, nigrescent in drying, striate with several concentric tuberculate ridges.

The type of this species was collected by J. Murga Pires and G. A. Black (no. 949) at Tabatinga, Amazonas, Brazil, on November 30, 1945, and is deposited in the Britton Herbarium at the New York Botanical Garden. The type is pistillate; another pistillate collection from the same locality is no. 1072 and staminate collections are nos. 939 and 947, all collected by the same collectors at the same locality. Klug 2322, from Loreto, Peru, is probably the same species and is

pistillate.

xCISTUS CULTORUM Moldenke, nom. nov.

Cistus villosus L. x C. laurifolius L. ex Rehd., Man. Cult. Trees & Shrubs, ed. 2, 646. 1940.

DESFONTAINIA PULCHRA Moldenke, sp. nov.

Suffrutex debilis; caule ramisque flexilibus griseis glabris, in statu juventute subtetragonis marginatisque; nodis distincte annulatis; internodiis abbreviatis; petiolis 1--3 mm. longis glabris compressis late marginatis; laminis coriaceis nitidis oblanceolatis 1--2 cm. longis, 5--8 mm. latis acutis saepe muticis, ad basin attenuatis, subintegris vel 2-denticulatis; floribus solitariis nutantibus.

Sprawling subshrub; stems and branches flexible, gray, glabrous, the younger parts more or less subtetragonal and margined, the outer bark readily peeling off; nodes distinctly annulate; principal internodes abbreviated, 1--2.5 cm. long; twigs numerous, short, leafy; leaves decussate-opposite; petioles 1--3 mm. long, glabrous, broadly margined and flattened; blades coriaceous, deep-green and very shiny above, pale-green or silvery beneath, oblanceolate,

1--2 cm. long, 5--8 mm. wide, acute and often muticous at the apex, gradually attenuate to the base, subentire or with two very small muticous teeth near the apex, the margins usually revolute; midrib very slender, deeply impressed above, slightly prominulent beneath, the short secondaries and ter-tiaries impressed above, practically indiscernible beneath; inflorescence terminating the short twigs; flowers solitary. apparently nutant; pedicels about 1.5 cm. long, dull-green, glabrous, shiny; calyx dull-green, deeply 5-fid, the lobes oblong-elliptic, 6--6.5 mm. long, 2--2.5 mm. wide, acute, glabrous, shiny; corolla-tube cylindric-infundibular, scarlet-crimson outside, pale-yellow within, about 2.5 cm. long, about 4 mm. wide at the base and 10 mm. wide at the apex, glabrous; corolla-lobes rich-yellow, ovate-lingulate, about 6 mm. long and 8 mm. wide, rounded at the apex, venose, glabrous; fruit globose, fleshy, about 5 mm. long and wide, glabrous.

The type of this very distinct species was collected by Julian A. Steyermark (no. 57344), sprawling over bluffs in rich moist woods at the base of Páramo de Tamá, 4--10 km. above Betania, 2500--2895 m. altitude, Táchira, Venezuela, on July 15, 1944, and is deposited in the herbarium of the Chicago Natural History Museum (sheet no. 1205340). Its small oblanceolate entire or minutely 3-denticulate leaves distinguish it at once from all other known species of this genus.

DESFONTAINIA STEYERMARKII Moldenke, ap. nov.

Frutex; ramis ramulisque gracilibus griseis glabris marginatis; nodis annulatis; petiolis glabris paullo marginatis; laminis coriaceis ovato-ellipticis vel ellipticis acutis
muticis, ad basin longe cuneato-attenuatis, glabris non
conspicue marginatis 4-6-denticulatis; calyce profundo 5fido, lobis ovato-lanceolatis glabris; corolla 1.5--1.7 cm.
longa.

Shrub, about 4 feet tall; branches and branchlets slender, gray, glabrous, the younger parts more or less subtetragonal and margined, the bark readily peeling off from older parts; nodes distinctly annulate; principal internodes 1.5-5 cm. long; leaves decussate-opposite, numerous, often with very much abbreviated several-leaved twigs in their axils; peticles slender, 3-8 mm. long, glabrous, slightly margined; blades coriaceous, rich-green above, pale-green beneath, not shiny, ovate-elliptic or elliptic, acute and muticous at apex, long-cuneate-attenuate to the base, with 2 or 3 irregular muticous teeth along each margin, glabrous, not revolute or very slightly so on the very margins; midrib slender, plane above, prominent beneath; secondaries very slender, 3--5 per side, mostly rather obscure above or very

slightly subimpressed in drying, conspicuous and prominulent beneath; veinlet reticulation mostly obscure above or very slightly subimpressed in drying, only the largest pertions subprominulous beneath; inflorescence axillary or subterminal, apparently erect, solitary; pedicels slender, 1.5--1.8 mm. long, glabrous; calyx deeply 5-fid, the lobes ovatelanceolate, 1--1.5 mm. long, acute, glabrous; corolla-tube cylindric, orange-red, 1.5--1.7 cm. long, 2--4 mm. wide, abruptly ampliate to 6 mm. just below the limb, glabrate; corolla-lobes elliptic-lingulate, pale-yellow, about 5 mm. long and 3 mm. wide, subacute, venose, glabrate; style ca. 2 cm. long, curved at apex, glabrous; fruit elliptic or subglobose, apiculate, about 9 mm. long and 8 mm. wide, glabrous.

The type of this species was collected by Julian A. Steyermark (no. 54597), in whose honor it is named, on wooded slopes along the Río Valladolid, between Quebrada Honda and Tambo Valladolid, 2000--3000 m. altitude, Santiago-Zamora, Ecuador, on October 12, 1943, and is deposited in the herbarium of the Chicago Natural History Museum (sheet no. 1205653). The species is obviously closely related to D. splendens H.B.K. and D. spinosa Ruíz & Pav., both of which differ in their much more heavily leathery-coriaceous leaves with long teeth and greatly revolute margins and their flowers 2.5--4 cm. in length.

ERIOCAULON CONGENSE Moldenke, sp. nov.

Herba; foliis rosulatis numerosis crassis 10--15 cm. longis glabris, ad apicem cucullatis, ad basin ampliatis et pellucido-fenestratis; vaginis laxis 10 cm. longis striatis obscure vel non fenestratis glabris, ad apicem bilobatis, lobis ovatis 1 cm. longis subacutis; pedunculis solitariis 15 cm. longis 8-costatis glabris non tortis; capitulis globosis albis 1 cm. diametro; floribus trimeris.

Herb; stems much abbreviated; leaves rosulate, numerous, thick-textured, bright-green, 10--15 cm. long, 4--8 mm. wide at the mid-point, ampliate and pellucid-fenestrate at base, cucullate at the apex, glabrous on both surfaces; sheaths loose, about 10 cm. long, striate, very obscurely or not at all fenestrate, glabrous, 2-lobed at the apex, the lobes ovate, about 1 cm. long, subacute, glabrous, erect; peduncles solitary, about 15 cm. long, 8-costate, glabrous, not twisted; heads globose, white, about 1 cm. in diameter; involucral bractlets few, stramineous, ovate, about 4 mm. long and 2.5 mm. wide, acute, glabrous; receptacular bractlets stramineous, oblong, about 4 mm. long and 1.5 mm. wide, long-acuminate at the apex, glabrous; staminate florets: sepals 3, black except at the base, separate except at the very base, oblanceolate, conduplicate-

falcate, about 3 mm. long, about 1.4 mm. wide if flattened out. acute at the apex, white-pilose on the back toward the apex; petals 3, connate into an infundibular, white, glabrous tube about 1.5 mm. long, the terminal free portions narrow-elliptic or oblanceolate, about 2 mm. long and 0.5 mm. wide, bearded toward the apex on the inner surface, with a narrowly elongate black gland in the center near the apex; stamens 6; filaments adnate to the corolla, 3 attached to the mid-point of the free portion of the petals, the other 3 attached to the sinuses between the petals, white, glabrous, somewhat surpassing the petals; anthers black, elliptic, about 0.4 mm. long; pistillate florets: sepals 3, black, separate. elliptic-falcate, conduplicate, about 3 mm. long and 2 mm. wide if flattened out, glabrous, subacute, shortpilosulous toward the apex on the outer surface; petals 3, firm. erect, white, narrowly oblong, separate, 2.5 mm. long, 0.5--0.7 mm. wide, obtuse, densely white-pilose on the inner surface on the upper half, with a narrowly elongate black gland in the center below the apex within; style 2 mm. long, glabrous; stigmas 3, erect, 2 mm. long; ovary subglobose, 2 mm. long and wide, 3-lobed, 3-sulcate, 3-celled, 3-ovulate.
The type of this species was collected by J. P. Chapin

The type of this species was collected by J. P. Chapin (no. 404) in the Kikeri meadow at the western base of Mount Mikeno, Kivu district, altitude 7200 feet, Belgian Congo, on June 20, 1927, and is deposited in the Britton Herbarium at the New York Botanical Garden. The collector describes it as a "lily-like plant with small heads of white flowers."

ERIOCAULON ROCKII Moldenke, sp. nov.

Herba aquatica submersa; foliis caespitosis leviter membranaceis erectis argute attenuatis ubique glabris; vaginis gracilibus adpressis glabris non striatis non tortis, lamina lanceolata erecta adpressa attenuata saepe bilobata vel fisfa; pedunculis gracillimis stramineis tricostatis paullo tortis glabris; capitulis nigris ellipticis vel hemisphaericis; floribus trimeris.

Submerged aquatic herb; stems obsolete; leaves tufted, thin-membranous, erect, 1--2.5 cm. long, about 1 mm. wide at the mid-point, sharply attenuate at the apex, glabrous throughout; sheath slender, appressed, about equaling the leavee, about 2 cm. long, not conspicuously striate, not twisted, glabrous throughout, obliquely split at the apex, the blade lanceolate, about 5 mm. long, erect, appressed, attenuate, sometimes bilobed or again split to the base; peduncles very slender, stramineous, 2.5--6.5 cm. long, 3-costate, slightly twisted, glabrous; heads black, elliptic or hemispheric, 1--4 mm. wide; involucral bractlets black, broadly elliptic or suborbicular, about 2 mm. long and 1.5 mm. wide, rounded at the apex, very concave on the inner and

convex on the outer surface, glabrous throughout, shiny; receptacle glabrous; receptacular bractlets black, oblanceolate. about 1.9 mm. long and 0.6 mm. wide, acute or shortly subacuminate at the apex, glabrous throughout; staminate florets: sepals 3, separate almost to the base, narrowly oblong, falcate, 1.5--1.7 mm. long, about 0.3 mm. wide, the upper 2/3 black, hyaline at the base, acute, glabrous throughout or very minutely ciliclate at the very apex; petals united into a subhyaline tube 1.8--2 mm. long, no free lobes seen; stamens 6 (sometimes only 5?); filaments widespreading, white, about 0.4 mm. long; anthers not seen; pistillate florets: sepals 3, separate, black, elliptic, navicular, about 1.7 mm. long and 0.6 mm. wide, sharply acute at the apex, glabrous throughout; petals 3, separate, narrowly oblong or linear, gray, about 1.5 mm. long and 0.2 mm. wide. acute at the apex, glabrous throughout, not glanduliferous; style slender, about 0.6 mm. long, glabrous; stigmas 3, filiform, erect, 0.4--0.6 mm. long; ovary subglobose, about 0.5 mm. long and wide, glabrous, 3-lobed, 3-celled, 3-ovulate.

The type of this little species was collected by J. F. Rock (no. 10843) at Saba on the eastern slopes of Likiang Snow Range, Yangtze watershed, Yünnan, China, in 1923 or 1924, and is deposited in the Britton Herbarium at the New York Botanical Garden. The material dissected was old, with seeds fully ripe in the pistillate florets. The staminate florets, therefore, were not observed at their best.

ERIOCAULON ROBINSONII Moldenke, ap. nov.

Herba parva; foliis caespitosis levibus non fenestratis adscendentibus graminoideis multinerviis obtusis glabris; vaginis cylindraceis arcte adpressis vel laxiusculis striatis leviter membranaceis vel subhyalinis, ad apicem oblique fissis, lamina lanceolata saepe bilobata erecta; pedunculis gracilibus 4-costatis tortis glabris griseis; capitulis hemisphericis vel conicis dense villosis; floribus trimeris.

Dwarf herb; stems extremely abbreviated or obsolete; leaves tufted, variable in width, thin-textured, not fenestrate, more or less ascending, grass-like, 1--4 cm. long, 1--4 mm. wide at the mid-point, apparently the earliest longest and broadest and these often not present any more at time of anthesis, many-nerved, rather blunt at the apex, glabrous; sheath cylindric, closely appressed or rather loose, 1--1.3 cm. long, striate, thin-membranous or almost subhyaline, usually shorter than the leaves, obliquely split at the apex, the blade lanceolate, 3--4 mm. long, often bilobed or even split to the base, appressed or rather loose, erect; peduncles slender, 1--8 cm. long, usually 2--3 cm. long, 4-costate, twisted, glabrous, gray; heads hemispheric or conic, 2--5 mm. in diameter; involucral bractlets light-

gray, broadly elliptic, sometimes hyaline, lightly pigmented toward the apex, about 2.5 mm. long and 1.9 mm. wide, obtuse at the apex, glabrous, shiny, the upper margin often more or less erose; receptacle long-villous; receptacular bractlets broadly obovate, hyaline, cucullate, about 2 mm. long and 1 mm. wide, rounded at the apex, glabrous throughout; staminate florets: sepals 3, separate, hyaline, elliptic-oblanceolate, decidedly falcate, about 1.3 mm. long and 0.4 mm. wide blunt at the apex, glabrous throughout; petals 3, united into a slender tube about 1.7 mm. long, the free lobes very short, about 0.2 mm. long, mucronate; stamens 6; anthers brown; pistillate florets: sepals 3, separate, narrowly oblong-lanceolate, gray, about 1.5 mm. long and 0.2 mm. wide. minutely bifid at the apex, long-pilose on the back; petals 3, separate, hyaline, narrowly oblong or linear, about 1 mm. long, long-pilose on the back, with a very narrow black gland on the back near the apex, not bearded; style filiform, about 0.5 mm. long, glabrous; stigmas 3, erect, filiform, about 1 mm. long; overy subglobose, about 0.4 mm. long and wide, 3-lobed, 3-sulcate, glabrous, 3-celled, 3-ovulate.

The type of this species was collected by Charles Budd Robinson (no. 1043) at Nha-trang and vicinity, Annam, French Indo-china, between March 11 and 26, 1911, and is deposited in the Britton Herbarium at the New York Botanical Garden. In habit and general appearance this species greatly resembles E. achiton Körn. of India, but that differs in having only 2 sepals in the staminate and pistillate florets and no petals in the pistillate florets. It is a pleasure to name this species in honor of the distinguished, though ill-starred, collector to whom we owe so much of our knowledge of the flora of the Philippines and other southeastern Asiatic areas.

ERIOCAULON YUNNANENSE Moldenke, sp. nov.

Herba; caule valde abbreviato; foliis paucis erectis firmis graminoideis multistriatis supra villosis subtus pilosulis glabrescentibus subulatic plerumque conduplicatis non fenestratis; vaginis cylindricis adpressis multistriatis glabris, ad apicem fissis, lamina lanceolata erecta adpressa attenuato-subulata glabra; pedunculis 1 vel 2 crassiusculis 5-costatis argute angulatis glabris; capitulis hemisphaericis albis; floribus trimeris.

Herb; stem greatly abbreviated, about 1 cm. long or less; leaves few, basal, erect, firm-textured, grass-like, 55--60 cm. long, about 1 cm. wide at the mid-point, many-striate, more or less villous on the upper surface and pilosulous on the lower surface toward the base and when young, glabrescent in age, subulate-tipped, often more or less conduplicate, not plainly fenestrate; sheath cylindric, appressed to

the peduncles, shorter than the leaves, 25--41 cm. long, many-striate, hardly twisted, glabrous, obliquely split at the apex. the blade lanceolate, erect, appressed, 3--6 cm. long, attenuate-subulate at the apex, glabrous; peduncles 1 or 2 per plant, relatively stout, about 5-costate with very prominent and sharp angles, glabrous (or microscopically puberulous within the sulcae); heads hemispheric, white, 10 -- 12 mm. in diameter; involucral bractlets broadly obovate or suborbicular, about 3 mm. long and 2.1 mm. wide, rounded or obtuse at the apex, usually membranous-margined at the apex and toward the apex and often splitting there, brownish toward the apex and in a median band to the base, villosulous on the back; receptacle very densely long-villous even between the involucral bractlets; receptacular bractlets broadly obovate, about 3.4 mm. long and 2.1 mm. wide, darkbrown toward the apex, lighter brown or stramineous toward the base, abruptly acuminate-mucronate at the apex, densely white-pubescent on the back from the widest part to the apex and including the mucro with short antrorse hairs, not otherwise bearded, glabrous toward the base; staminate florets short-pedicellate: sepals 3, separate, navicular, broadly obovate, cannot be flattened out, dark-brown except at the base, about 2.9 mm. long, each half about 0.7 mm. wide, abruptly short-acuminate or mucronate at the apex, densely short-pubescent at the apex with white antrorse hairs, hardly distinctly bearded; petals connate into a slender stramineous tube about 1.7 mm. long, glabrous, the free lobes lanceolate, about 0.4 mm. long, sharply attenuate-acute, black-glanduliferous near the apex, pilose; stamens 6; pistillate florets short-pedicellate: sepals 3, separate, navicular, cannot be flattened out, elliptic, dark-brown on the upper half, lighter at the apex and base, about 3.2 mm. long, each half about 1 mm. wide, blunt or subacute at the apex, short-pubescent at the apex with white antrorse hairs, hardly distinctly bearded, otherwise glabrous; petals 3, separate, subhyaline, linear-oblong, about 3 mm. long and 0.2 mm. wide, subacute at the apex, densely long-villous on and near the margins at about the middle with hairs that almost reach the top of the petal, bearded at the apex, glanduliferous on the back just below the apex; style about 0.6 mm. long, glabrous; stigmas 3, erect, about 0.8 mm. long; ovary elliptic, about 1 mm. long, deeply 3-lobed and 3sulcate, glabrous, 3-ovulate.

The type of this large and distinct species was collected by A. Henry (no. 12362) at Szemo, Yünnan, China, and is deposited in the Britton Herbarium at the New York Botanical Garden. In habit it reminds one of E. decangulare L. of the

southeastern United States.

HELIETTA CUBENSIS Monachino & Moldenke, sp. nov.

Frutex (?); ramis gracilibus glabris suberosis; foliis 3-foliolatis; petiolis gracilibus glabris pellucido-punctatis; foliolis sessilibus leviter coriaceis oblanceolatis glabris utrinque conspicue pellucido-punctatis, subtus glaucescentibus, supra nitidis, ad apicem rotundatis, ad basin longe attenuatis vel cuneatis, integris; inflorescentiis terminalibus paniculatis amplis ubique glabris et pellucido-punctatis regulariter trifurcatis; floribus 4-meris.

Shrub (?); branches slender, glabrous, somewhat longitudinally fissured, suberose, and ridged in drying; leaves opposite, trifoliolate; petioles slender, 2--6 cm. long, glabrous, conspicuously pellucid-punctate; leaflets sessile, thin-coriaceous, oblanceolate, 3.5--12 cm. long, 1.5--4 cm. wide, glabrous and conspicuously pellucid-punctate on both surfaces, shiny above, glaucescent beneath, rounded at the apex, long-attenuate or cuneate at the base, entire, the margins slightly subrevolute (in drying, at least); inflorescence terminal, paniculate, ample, about 12 cm. long and to 14 cm. wide at the base, glabrous and pellucid-punctate throughout, regularly trifurcate, the branches wide-spreading; peduncles about 1.5 cm. long, glabrous, pellucid-punctate; inflorescence-branches or flowers borne in pairs at each node of the inflorescence, in cymose fashion, one on each side of the axis, each subtended by a triangular-acute glabrous scale-like bractlet about 1 mm. long; pedicels very slender, about 2 mm. long, glabrous; flowers 4-merous; sepals 4, heavy, tough, suborbicular, about 1 mm. long and wide, rounded at the apex, imbricate, scarious-margined, glabrous on both surfaces except for the slightly eroseciliolate margins, very convex on the back, concave within; petals 4, oblanceolate-lingulate, about 3 mm. long and 1.3 mm. wide, translucent-margined, rounded at the apex, only slightly narrowed toward the base, glabrous, pellucid-punctate; disk large, cupuliform, the erect rim about 0.78 mm. high, irregularly undulate and scaly; stamens 4, inserted at the base of the rim of the disk, among the scales; filaments terete, about 1.3 mm. long, translucent, broadened at the base, attenuate above the disk; anthers about 0.5 mm. long. 2-celled, apiculate at the apex, the 2 cells divergent at the base; pistil solitary, central; style very short, blunt, about 0.4 mm. long, terminated by a discoid stigma of the same diameter as the style; ovary 4-celled; ovules 2 in each cell, apically attached; fruit not seen.

The type of this species was collected by Brothers Clément, Chrysogono, and Alain [Clément 3971] at Mina Cayoguan, Pta. Gorda, Oriente, Cuba, on July 21, 1944, and is deposited in the Britton Herbarium at the New York Botanical Garden. The species is obviously related to H. glaucescens Urb.,

the only other known West Indian species of the genus, which differs in its shorter petioles, shorter and narrower leaflets, very much smaller and narrower non-trifurcate inflorescences, puberulent inflorescence-branches, pedicels, bractlets, and sepals, more triangular-ovate and acute sepals, and slightly larger anthers.

HYPERBAENA LONGIUSCULA var. CLEMENTIS Moldenke, var. nov.

Haec varietas a forma typica speciei foliis oblongo-ellipticis 15--16.5 cm. longis, 5--6 cm. latis, ad apicem obtusis vel rotundatis, ad basin non attenuatis, et costa supra argute elevatis recedit.

This variety differs from the typical form of the species in having leaves with blades oblong-elliptic, 15--16.5 cm. long, 5--6 cm. wide, obtuse or rounded at the apex and base, not attenuate to the base, and the midrib very sharply elevated on the upper surface from the base to the apex.

The type was collected by Augustin Clément Téteau, Brother Clément (no. 3633) on the new way to Río Yagrumajes, east of Moa, Oriente, Cuba, on May 17, 1944, and is deposited in the Britton Herbarium at the New York Botanical Garden.

IPOMOEA BATATAS f. TRIFIDA Moldenke, f. nov.

Haec forma a forma typica speciei foliis profunde tripartitis recedit.

This form differs from the typical form of the species in having all of its leaves uniformly deeply 3-parted or the lateral lobes sometimes again bifurcate. The lobes are oblanceolate, long-acuminate at the apex, and attenuate to the base.

The type was collected by Reinaldo Espinosa $(\underline{\text{no.}} 492)$ in cultivated and irrigated land at La Fornia, alt. $\overline{1400}$ m., Loja, Ecuador, on June 5, 1946, and is deposited in the Britton Herbarium at the New York Botanical Garden. It is called "camote indio" by the natives.

IPOMOEA CARNEA f. ALBIFLORA Moldenke, f. nov.

Haec forma a forma typica speciei corollis albis recedit. This form differs from the typical form of the species in having white corollas.

The type was collected by Reinaldo Espinosa (no. 490) at La Fornia, alt. about 1400 m., Loja. Ecuador, on June 5, 1946, and is deposited in the Britton Herbarium at the New York Botanical Garden. The collector states that it was growing among plants of the typical form.

IPOMOEA DUMETORUM f. ALBA Moldenke, f. nov.

Hase forma a forma typica speciei corollis albis recedit. This form differs from the typical form of the species in

having white corollas.

The type was collected by Reinaldo Espinosa (no. 215a) at La Argelia, southern Loja, Ecuador, on April 25, 1946, and is deposited in the Britton Herbarium at the New York Botanical Garden.

LANTANA DEPRESSA Small (Fig. 1)

Literature: Small, Bull. N. Y. Bot. Gard. 3: 436. 1905; Small, Addisonia 3: 69--70, pl. 115. 1918; Moldenke, Annot. List 108. 1939; Moldenke, Known Geogr. Distrib. Verbenac. 5 & 94. 1942.

This species used to be justly considered a rare and little-known one, but so much splendid collecting done in Florida during the past 30 years has yielded so many collections that the species can no longer be regarded as anything but well-known. The following is a list of some of the specimens recently annotated by me in my monographic work on the

group:

FLORIDA: Dade Co.: Bailey & Bailey 6016 (Ba), 6217 (Ba), 6217a (Ba); N. L. Britton 156 (N), s.n. [Miami, April 1, 1903] (Cm); Buswell s.n. [May 14, 1934] (Bu), s.n. [April 21, 1935] (Bu); Demares 10208 (Bt, Du, Hp); Elder 442 (H), 510 (H); Esselbaugh s.n. [Frinceton, March 16, 1946] (Ur); Harshberger s.n. [August 15, 1911] (Up); Hawkins s.n. [Homestead, 9/16/27] (F1, F1); Lightfoot s.n. [Key Biscayne, Apr. 28, 1917] (Ba); B. McAllister 315a (H); H. N. Moldenke 735 (Go, H, I, N, N, Up, Ur); O'Neill 1941 (I), 7135 (I), 7134 (I), 7135 (I), 7137 (I), 7138 (I), 7140 (I), s.n. [Peters, September 17, 1929] (I), s.n. [Princeton, September 19, 1929] (I); B. H. Patterson s.n. [Miami, Feb. 2, 1918] (Cm); W. W. Rowlee s.n. [Dec. 23, 1902] (It); J. K. Small 2217 (N), 3845 (N), 7355 (N, N), 8793 (N); Small & Carter 747 (N --type), 2678 (N), s.n. [Oct. 31st to Nov. 4th, 1903] (We); Small & Mossier 5523 (N), 6367a (N); Small, Mosier, & Small 5667 (N), 6506 (N); Small & Nash 180 (N); Small & Small 4781 (N), 4808 (It), 4818 (Go, N), 6824 (F1, Mi, N, Up); Small & Wilson 1826 (N), s.n. [May 16, 1904] (H); Tidestrom 6987 (I); Welch 1536 (Dp); J. P. Young 195 (It), 204 (It). Saint Lucie Co.: O'Neill 7145 (I).

Explanation of Figure 1: a, Habit, x 3/4; b, bractlet, x 5; c, calyx, x 5; d, pistil, x 5; e, corolla split open

and flattened out. x 5.

LANTANA HISPIDA var. TERNATA Moldenke, var. nov.

Haec varietas a forma typica speciei foliis ternatis recedit.

This variety differs from the typical form of the species in having its leaves whorled in groups of three.

The type was collected by Gustavo Aguirre B. and B. P.

Reko (no. 172) at Necaxa, Puebla, Mexico, in April, 1946, and is deposited in the Britton Herbarium at the New York Rotanical Garden.

LIPPIA BRACTEOSA (Mart. & Gal.) Moldenke, comb. nov. Lantana bracteosa Mart. & Gal., Bull. Acad. Roy. Brux., sér. 1, 11 (2): 326. 1844.

LIPPIA LIBERIENSIS Moldenke, sp. nov.

Frutex vel arbor; ramis orscure tetragonis vel subteretibus dense breviterque pubescentibus glabrescentibus; nodis annulatis; foliis oppositis; petiolis dense breviterque pubescentibus, in statu senectute spareissime strigillosis vel pilosulis; laminis firme membranaceis ovato-lanceolatis ad apicem argute acutis serrulatis, ad basin acuminatis, in statu juventute utrinque dense breviterque pubescentibus, in statu senectute supra scabris et plusminusve strigosis, subtus strigillosis pulverulentisque; inflorescentiis axillaribus capitatis nutantibus.

Shrub or tree; branches and branchlets obscurely tetragonal or subterete, densely short-pubescent when very young, glabrous in age, light-brownish; nodes annulate; principal internodes 1.5--7 cm. long; leaves decussate-opposite; petioles slender, 3--5 mm. long, densely short-pubescent when very young, very sparsely strigillose or pilosulous when mature, the hairs mostly in 2 bands on the axial surface; blades firmly membranous, ovate-lanceolate, 2.5--7.5 cm. long, 1.5--3.5 cm. wide, sharply acute at the apex, regularly serrulate from the base to the apex and more or less prolonged into the petiole, densely short-pubescent on both surfaces when young, scabrous and more or less strigose above or subglabrous when mature, irregularly strigillose on the venation beneath and usually more or less pulvenulent beneath when mature; inflorescence axillary, capitate, nodding, usually 2 per node near the apex of the branches or branchlets; peduncles very slender, 2--2.5 cm. long, densely short-pubescent or puberulent; heads 1.3--1.6 cm. long, 1.7--2.4 cm. wide, many-flowered; bracts broadly ovate, the lowest about 1.5 cm. long and almost 1 cm. wide at the base, subacuminate at apex, densely puberulent.

The type of this species was collected by Alberto Brenes in the vicinity of Liberia, Guanacaste, Costa Rica, in 1910, and is deposited in the Britton Herbarium at the New York

Botanical Garden.

MOZARTIA EMARGINATA Moldenke, sp. nov.

Frutex vel arbor; ramulis gracilibus griseis glabris; foliis oppositis; petiolis gracilibus glabris; laminis leviter coriaceis ellipticis vel oblanceolatis emarginatis, ad



Fig. 1

Lantana depressa Small

basin acutis vel acuminatis, utrinque glabris nitidisque non

punctatis integris.

Shrub or tree; branchlets and twigs slender, gray, glabrous; leaves decussate-opposite; petioles slender, 6--10 mm. long, glabrous; blades thin-coriaceous, elliptic or oblanceolate, 3.5--6.5 cm. long, 1.7--3 cm. wide, emarginate at the arex. acute or acuminate at the base, glabrous and shiny on both surfaces, not noticeably punctate, entire or slightly wavy-margined, slightly subrevolute at the margins when dry; midrib slender, impressed above, very strongly prominent beneath; secondaries very slender, about the same size and strength as the tertiaries and veinlets, they, with the veinlets, forming a dense conspicuous reticulum which is equally and beautifully prominulous on both surfaces, a rather indistinct collective vein uniting the secondaries near the margins; inflorescence axillary, apparently few-flowered; flowers not seen; fruiting peduncles slender, 1.5--2 cm. long, glabrous; fruiting-calyx incrassate, glabrous, persistent, closely appressed to the base of the fruit, about 5 mm. in diameter (including the lobes), the lobes 4, ovatetriangular, about 1.5 mm. long and 1 mm. wide at the base, subacute at the apex; fruits 1--3 per peduncle, sessile on the peduncle, hard, globose, about 6 mm. long and wide, glabrous.

The type of this handsome species was collected by George C. Bucher (\underline{no} <u>14253</u>) at Moa, Oriente, Cuba, in July, 1939, and is deposited in the Britton Herbarium at the New York

Botanical Garden.

PADUS CAPULI (Cav.) Moldenke, comb. nov.
Frunus Capuli Cav. ex Spreng., Syst. Veg. 2: 477. 1825.

PAEFALANTHUS ESPINOSIANUS Moldenke, sp. nov.

Herba caespitosa; foliis numerosis firmis patentibus lanceolato-attenuatis argute apiculatis utrinque plusminusve pilosulis glabrescentibus striatis non fenestratis; vaginis laxis glabris, ad apicem bilobatis, lobis ovatis erectis; pedunculis solitariis gracilibus brevibus 3-costatis tortis obscure pilosulis; capitulis obconico-hemisphaericis.

Tufted herb; stems very much abbreviated, long-villous at the apex, 1--2 cm. long; leaves numerous, bright-green, firm, spreading, lanceolate-attenuate, 1--1.5 cm. long, 1.5 --2 mm. wide at the mid-point, sharply apiculate at the apex, more or less scattered-pilose on both surfaces when young, glabrescent in age, several-striate, not plainly fenestrate; sheath loose, glabrous, 1.3--1.5 cm. long, the basal tubular portion 7--8 mm. long, the apical portion split into 2 ovate, erect, dissimilar lobes almost 1 cm. long; peduncles solitary at the apex of each stem, slender, almost

obsolete or to 2.3 cm. long, 3-costate, twisted, obscurely pilosulous, more persistently so beneath the head; heads obconic-hemispheric, about 5 mm. in diameter; involucral bractlets few, in 2 series, light-brown, lanceolate, about 5 mm. long, about 1.5 mm. wide at the widest point, attenuateacute or subacuminate at the apex, glabrous and shiny throughout, surpassing the florets, concave on the inner and convex on the outer surface; receptacle long-villous; receptacular bractlets narrowly oblong, about 2.6 mm. long, light brown, darker toward the apex, navicular, about 0.4 mm. wide, more or less appressed-villous on the back with antrorse hairs, not bearded; staminate florets short-pedicellate; sepals 3, separate practically to the base, dark-brown on the upper half, oblong-oblanceolate, about 2.1 mm. long and 0.5 mm. wide, obtuse at apex, more or less villous on the back, with very much appressed antrorse hairs, bearded at the apex; petals 3, united into a slender lightly stramineous tube about 1.7 mm. long, slightly ampliate at the apex, the lobes erect, lanceolate-ovate, about 0.5 mm. long, acuminate at apex, somewhat involute; stamens 3; filaments filiform, very short, inserted at the base of the corollalobes and opposite them; anthers not seen; pistillate florets short-pedicellate: pedicels about 0.6 mm. long; sepals 3, separate practically to the base, erect, brown, darkest on the upper half, spatulate, about 2.1 mm. long, about 0.6 mm. wide at the widest part, acute at the apex, long-villous with antrorse hairs on the back, usually more or less bearded at the apex on the back; petals 3, separate to the base, fitting snugly between the ovary-wings, lightly stramineous, erect, oblanceolate, about 2.1 mm. long and 0.6 mm. wide, acute or apiculate at apex, more or less villous on the back, especially along the margins above the middle and at the apex, not bearded, not glanduliferous; style about 0.8 mm. long, glabrous, terminated by 3 erect stigmas and 3 style-appendages which are all 0.6--0.8 mm. long; ovary elliptic, deeply 3-lobed and 3-alate, glabrous, 3-celled.

The type of this species was collected by Julian A. Steyermark (no. 54342) in dense tufts in moist places on a paramo at 11,200 feet elevation along the trail between Pailas and El Pan, Santiago-Zamora, Ecuador, on September 10, 1943, and is deposited in the Britton Herbarium at the New York Botanical Garden. The species resembles P. Karstenii Ruhl. in habit. It is named in honor of Dr. Reinaldo Espinosa, who is doing such noteworthy work on the flora of Ecuador.

PAEPALANTHUS LOXENSIS Moldenke, sp. nov.

Herba caulescens; ramis gracilibus usque ad 10 cm. longis brachiatis dense longeque villosis; foliis numerosissimis firmis patentibus apiculatus utrinque glabris nitidis non fenestratis; vaginis brevibus profunde fissis, lobis lanceolatis acuminatis glabris erectis; pedunculis solitariis 3costatis paullo tortis ubique glabris; capitulis hemisphaericis griseis vel stramineis.

Caulescent matted herb; stems slender, to 10 cm. or more long, branched, densely long-villous, especially at the apex, completely hidden by the abundant imbricately sheathing leaf-bases except toward the base on older stems; leaves abundant, rather firm, spreading, about 1 cm. long or less, about 1 mm. wide at the mid-point, apiculate, essentially glabrous on both surfaces, not fenestrate; sheath hidden among the upper leaves, about 1.2 cm. long, deeply split to below the middle, the 2 lobes equal, lanceolate, about 7 mm. long, acuminate, glabrous, erect, but remote from the peduncle; peduncles usually solitary at or near the tip of each branch or stem, 4--5 cm. long, 3-costate, slightly twisted, glabrous throughout; heads hemispheric, gray or stramineous, hairy, 3--4 mm. in diameter; involucral bractlets elliptic, very concave on the inner and convex on the outer surface, stramineous or grayish, 5--4.5 mm. long, 1.5--1.7 mm. wide, acute or slightly apiculate, more or less villous on the back especially along the margins and at the apex with antrorse hairs, usually somewhat short-bearded at the apex; receptacle densely long-villous; receptacular bractlets narrowly spatulate, 1.7--1.9 mm. long, about 0.4 mm. wide, dark-brown toward the apex, hyaline at base, blunt at apex and there densely bearded, otherwise glabrous, slightly navicular; staminate florets: sepals 3, connate only at the very base, oblanceolate, 1--1.3 mm. long, about 0.4 mm. wide, obtuse at apex, brown toward the apex, much lighter toward the base, glabrous except for the densely bearded apex; petals 3, united into an infundibular stramineous tube about 0.8 mm. long, glabrous, the lobes lanceolate, erect, about 0.4 mm. long, not glanduliferous, glabrous; stamens 3, inserted at the mouth of the corolla-tube; filaments about 0.3 mm. long, glabrous; pistillate florets: sepals 3, apparently separate to the base, spatulate, dark-brown toward the apex, much lighter or stramineous toward the base, about 1.5 mm. long and 0.6 mm. wide, rounded at apex, long-pilose on the inner surface with antrorse hairs; petals 3, separate, spatulate, hyaline, about 1.3 mm. long and 0.6 mm. wide, long-pilose along the margins and toward the apex, not bearded, not glanduliferous; style about 0.4 mm. long, glabrous; ovary subglobose, deeply 3-lobed and-sulcate, glabrous, 3-celled; stigmas 3, about 0.4 mm. long, erect; styleappendages 3, about the same length as the stigmas and issuing from the same level.

The type of this species was collected by Julian A. Steyermark (no. 54432), growing in dense mats on moist banks,

between Tambo Cachiyacu, La Entrada, and Nudo de Sabanillas, altitude 2500--3500 m., Loja, Ecuador, on October 7, 1943, and is deposited in the Britton Herbarium at the New York Botanical Garden. The species resembles P. Glaziovii Ruhl., but differs in the length of its peduncles and in floral characters.

PAEPALANTHUS STEINBACHII Moldenke, sp. nov.

Herba acaulescens; foliis rosulatis leviter membranaceis recurvo-adpressis linearibus fenestratis argute attenuatis glabris; vaginis arcte adpressis glabris, ad apicem oblique fissis, lamina argute acuta; pedunculis numerosis gracillimis 2-costatis tortis glabris; capitulis hemisphaericis

brunneis vel nigris.

Acaulescent herb; leaves basal, rosulate, thin-membranous, appressed to the ground or ascending, shorter than the peduncles. linear, 4--5 cm. long, about 1.5 mm. wide at the middle, many-nerved, plainly fenestrate throughout, sharply attenuate at the apex, glabrous throughout; sheaths closely appressed to the peduncle, about 3 cm. long, glabrous, obliquely split at the apex, the blade sharply acute; peduncles numerous, about 20 per plant, very slender, 6--11 cm. long, 2-costate, twisted, glabrous throughout, far surpassing the leaves; heads hemispheric, brown or black, 3--4 mm. in diameter; involucral bractlets lanceolate, hyaline or gray, 1--1.5 mm. long, acute at the apex, glabrous on both surfaces; receptacle apparently glabrous; receptacular bractlets narrowly oblong, falcate, about 2 mm. long and 0.4 mm. wide, dark-brown or black on the upper half, the lower half hyaline, acute at the apex, glabrous throughout, not bearded; staminate florets: sepals 3, elliptic, about 1.3 mm. long and 0.2 mm. wide, black, united into a slender tube at the base, acute, glabrous throughout; petals 3, about 1 mm. long, united into a hyaline tube, the free portions 0.2--0.3 mm. long, hyaline, acute, glabrous, with a black gland near the center on the back; stamens 3; anthers globose, yellow, about 0.1 mm. long; pistillate florets: sepals 3, narrow-elliptic or oblong, about 1.2 mm. long and 0.3 mm. wide, dark-brown or black except at the very base, acute, glabrous throughout; petals 3, separate to the base, falcate, narrowly oblong, about 1 mm. long and O.1 mm. wide, brownish, glabrous throughout, not bearded, not glanduliferous; style about 0.6 mm. long, glabrous; stigmas 3, about 0.4 mm. long; ovary oblong, about 0.3 mm. long and 0.2 mm. wide, brown, slightly granular, 3-celled, 3-ovulate

The type of this species was collected by José Steinbach (no. 2669) at Campos de Terebinto, on the banks of a small lake, Santa Cruz, Bolivia, on August 22, 1916, and is deposited in the Britton Herbarium at the New York Botanical

Garden.

PAEPALANTHUS SUBSESSILIS Moldenke, sp. nov.

Herba valde pumila dense caespitosa; caulibus valde abbreviatis, ad apicem dense longeque villosis; foliis rosulatis lanceolatis 6--8 mm. longis, ca. 1 mm. latis, argute apiculatis multistriatis non fenestratis, in statu juventute margine plusminusve longe ciliatis recurvatis, in statu senectute glabrescentibus; inflorescentiis subsessilibus solitariis; pedunculis 1.5--1.8 mm. longis antrorse adpressopilosis, bracteis 4 foliaceis ad basin connatis glabris subtentis.

Very dwarf densely despitose herb; stems very much abbreviated, densely long-villous at the apex, obscured by the dense leaves; leaves rosulate. lanceolate. 6--8 mm. long, about 1 mm. wide at the mid-point, sharply apiculate at the apex, greatly ampliate and sheathing the stem at the base, menv-striate, not fenestrate, membranous at the base, more or less long-ciliate on the margins when young, completely glabrous in age. recurved; inflorescence subsessile, solitary at the apex of the stem; typical sheath absent; peduncle absent or obsolete, 1.5--1.8 mm. long, antrorsely appressed-pilose, subtended by 4 leaf-like bracts which are connate at the base into a short tube about 1 mm. long. then bilabiate into 2 exactly similar wide-spreading lips about 3.5 mm. long, each lip deeply bifid almost to the base, each lobe ovate, about 2.5 mm. long and 1 mm. wide, attenuate to an acute apex, ascending-spreading, curvate, and appressed to the head, light-brown, glabrous throughout; heads hemispheric, 3.5--4 mm. in diameter, gray-brown, villous; involucral bractlets few, in 1 or 2 series, broadly ovate, very concave on the inner and convex on the outer surface, brown, very dark at the apex, about 2.5 mm. long and 1.8 mm. wide, abruptly acute at the apex, glabrous throughout except for the very small tuft of short hairs on the back at the very apex; receptacle very densely longvillous; receptacular bractlets few, elliptic-oblanceolate, about 1.7 mm. long and 0.4 mm. wide, dark-brown throughout, rounded and subcucullate at the apex, densely bearded on the back at the apex, otherwise glabrous; staminate florets: sepals 3, separate to the base, dark-brown, elliptic, concave on the inner and convex on the outer surface, about 1.3 mm. long and 0.5 mm. wide, densely bearded on the back at the apex, otherwise subglabrous; petals 3, connate into a slender hyaline tube about 0.6 mm. long, the free lobes lanceolate, about 0.3 mm. long, hyaline, erect, blunt; stamens 3, inserted about 1/2 way down the corolla-tube; filaments about 0.2 mm. long, glabrous; anthers white, oblong, about 0.4 mm. long, composed of two separate versatile thecae dehiscing by means of longitudinal slits; pistillate florets: sepals 3, separate, broadly obovate, navicular-conduplicate, dark-brown or blackish, about 1.3 mm. long and 0.7 mm. wide (when flattened out), subcordate at the apex, rather densely long-villous on the back from below the middle to the apex, densely bearded on the back at the apex; petals 3, separate, hyaline, elliptic, about 0.8 mm. long and 0.4 mm. wide, densely long-villous on the back, not bearded, not glandu-liferous; style abbreviated, about 0.1 mm. long, glabrous, terminated by 3 erect stigmas about 0.1 mm. long and 3 erect style-appendages about 0.2 mm. long; ovary subglobose, about 0.3 mm. long and wide, 3-angled, glabrous, 3-celled.

The type of this distinct species was collected by Julian A. Steyermark (no. 55495) on a dry paramo at an elevation of 10,000 feet, between Buenos Aires and Páramo de las Rosas, Lara, Venezuela, on February 11, 1944, and is deposited in the Britton Herbarium at the New York Botanical Garden. The species resembles P. lodiculoides Moldenke in habit, the latter growing in similar habitats in Colombia. The collect-

or records the common name "flor de tierra".

PHYLA STRIGULOSA (Mart. & Gal.) Moldenke, comb. nov.

<u>Lippia strigulosa</u> Mart. & Gal., Bull. Acad. Roy. Brux.,
ser. 1, 11 (2): 519. 1844.

PHYLA STRIGUIOSA var. FARVIFOLIA (Moldenke) Moldenke, comb. nov.

Phyla yucatana var. parvifolia Moldenke, Phytologia 2: 141--142. 1946.

PTERIDIUM LATIUSCULUM f. BERDII Moldenke, Am. Midl. Nat. 35: 313, hyponym (1946), f. nov.

Haec forma a forma typica speciei laminis non ternatis differt.

This form differs from the typical form of the species in having the lowest pinnae of its fronds not much larger than those immediately above them; thus the fronds are not at all ternate. Mr. C. A. Weatherby, of the Gray Herbarium of Harvard University, in a letter to me dated August 1, 1945, agrees that this character is probably transmissible, but apparently regards it as merely a clone. The type was collected by Morris and DeEtta Berd [H. N. Moldenke 16593] in woodlands, North Warren, Warren County, Pennsylvania, on July 31, 1944, and is deposited in the herbarium of the Carnegie Museum at Pittsburgh. The form occurs quite abundantly in this region, usually mixed with the typical form, but often in large numbers. It has a very distinct appearance in the wild. Like the typical form, its fronds are very often heavily infested by Cryptomyces pteridis (Rebent.) Rehm.

STACHYTARPHETA CONFERTIFOLIA Moldenke, sp. nov.

Frutex; ramis gracilibus subteretibus sarmentosis glabratis; internodiis valde abbreviatis; foliis sessilibus oppositis dense confertis succulentis anguste ellipticis parvis obtusis integris, ad basin angustatis, utrinque glabris subtus dense punctatis.

Small shrub; branches slender, subterete, dark, twiggy, glabrate; twigs similar, densely foliate; internodes extremely abbreviated, 1--5 mm. long; leaves sessile, decussate-opposite, crowded, probably somewhat fleshy, narrowly elliptic, 7--13 mm. long, 2.5--5 mm. wide, obtuse at the apex, entire, narrowed to the base, glabrous on both surfaces and densely punctate beneath; midrib very slender, obscure on both surfaces; vein and veinlet reticulation indiscernible; inflorescence terminal, spicate, solitary; spikes sessile. 3--4 cm. long, densely many-flowered; flowers closely imbricate; rachis minutely puberulent, rather deeply sculptured after the fruit has fallen; bractlets lanceolateovate, about 6.3 mm. long and 2.7 mm. wide, gradually attenuate to the sharply acute apex, glabrous; calyx heavy-textured, tubular, about 1 cm. long and 1.8 mm. wide, glabrous throughout, its rim 5-toothed, the teeth unequal, ovatetriangilar, 1.3--1.8 mm. long, 0.9--1.3 mm. wide, abruptly acute at the apex; corolla hypocrateriform, its tube slender, about 1.5 cm. long and 1.5 mm. wide, glabrous, its limb 5-parted, the lobes unequal, broadly obovate-elliptic, 5--8 mm, long, 4--7 mm. wide, rounded at the apex, slightly wavy-margined, conspicuously venose, glabrous; stamens 2, inserted about 11.7 mm. above the base of the corolla-tube; free portion of filaments filiform, about 0.9 mm. long. glabrous; anthers dorsifixed near the middle, about 1.8 mm. long; style capillary, about 2 cm. long, glabrous; stigma capitate, about 0.5 mm. wide; ovary ovate, about 1.8 mm. long and 1.3 mm. wide, glabrous; fruiting-calyx and fruit not seen.

The type of this very distinct species was collected by Louis O. Williams and Vicente Assis (no. 6639) in a campo at Serra da Mutuca, beyond Barreiro, Municipio of Nova Lima, at an altitude of 1400 m., Minas Geraes, Brazil, on April 15, 1945, and is deposited in the Gray Herbarium of Harvard University.

STACHYTARPHETA STEYERMARKII Moldenke, sp. nov.

Planta lignosa; ramis acute tetragonis decussato-puberulis plerumque alatis; nodis ampliatis annulatis; foliis oppositis; petiolis dense pubescentibus paullo marginatis; laminis leviter chartaceis elliptico-ovatis acutis argute serratis, supra parce breviterque pubescentibus, subtus dense breviterque pubescentibus.

Woody plant; branches acutely tetragonal, puberulent on alternate pairs of sides, the angles often slightly margined, often somewhat ampliate and annulate at the nodes; principle internodes 1.5--4 cm. long; leaves decussate-opposite; petioles slender, about 1 cm. long, rather densely pubescent, somewhat margined; blades thin-chartaceous, ellipticovate. 3--4 cm. long [immature?], 1.3--2.5 cm. wide, acute at the apex, regularly sharp-serrate from almost the base to the apex. rather sparsely short-pubescent above, densely short-pubescent beneath; midrib very slender, plane above, prominulent beneath; secondaries very slender, 5 or 6 per side, ascending, slightly arcuate, plane above, very slightly prominulent beneath; inflorescence terminal; peduncles to about 3 cm. long, puberulent on one pair of sides like the branches; floriferous portion of the spikes to about 20 cm. long after anthesis; rachis stout, about 4 mm. in diameter, puberulent-strigillose on two opposite sides, deeply sculptured in fruit; bractlets lanceolate, 5--7 mm. long, gradually attenuate to a long-acuminate apex, appressed or recurved after anthesis, minutely puberulent or glabrate, more or less ciliolate along the margins, barely equaling the calyx during anthesis and then more densely puberulent; calyx about 5 mm. long, densely puberulent; corolla dark-violet. hypocrateriform, somewhat exserted from the calyx, its tube about 7 mm. long, glabrous.

The type of this species was collected my good friend, Dr. Julian A. Steyermark (no. 54834), in dry rocky desert hills above La Toma, alt. 1520-1830 m., Loja, Ecuador, on October 24, 1943, and is deposited in the herbarium of the Chicago Natural History Museum. It is a pleasure to dedicate this species to Dr. Steyermark, who has done such uniformly splendid and valuable collecting in the southern United

States. Central America. and South America.

SYMBOLANTHUS MACRANTHUS (Benth.) Moldenke, comb. nov. Lisianthus macranthus Benth., Plant. Hartweg. 144. 1839.

XVERBENA BAILEYANA Moldenke, hybr. nov.

Herba; ramis erectis brachiatis tetragonis sulcatis albo-strigillosis; nodis annulatis; petiolis obscuris late alatis; foliis chartaceis ovatis, ad basin cuneatis, ad apicem acutis, irregulariter inciso-lacinistis utrinque strigillosis subra scabris.

Herb; stems erect, branched, rather sharply tetragonal, sulcate between the angles, strigillose with short, stiff, white, antrorsely subappressed hairs; nodes annulate; principal internodes 2.5--5 cm. long; leaves decussate-opposite, usually with several small ones on very abbreviated twigs in their axils; petioles obsolete or to 2 cm. long and broadly

winged, merging indistinguishably into the base of the blade: blades chartaceous, rather uniformly bright-green on both surfaces, 7--10 cm. long, 2.5--6 cm. wide, ovate in outline, acute at apex, cuneately narrowed into the broadly winged petiole at the base, irregularly and deeply incisedlaciniate, the lowermost lobes on the largest leaves often hastate, strigillose on both surfaces with short subappressed antrorse whitish hairs, scabrous above when the finger is drawn from the apex toward the base; midrib slender, impressed above, prominulous beneath; secondaries slender, 4 or 5 per side, ascending, not much arcuate, irregularly branched, a branch usually extending to the tip of the larger lobes; veinlet reticulation subimpressed above, plane but visible beneath; inflorescence a terminal panicle, the lowest branches of which are axillary to the uppermost much reduced leaves, the panicle about 15 cm. long and 5 cm. wide, its branches erect or ascending, strigillose-puberulent; bracts lanceolate, 5--8 mm. long, densely strigillose; bractlets similar but smaller, attenuate; calyx about 2.5 mm. long, densely strigillose, slightly exceeding the bractlets.

The type of this hybrid was collected from cultivated material in the Royal Botanical Garden at Paris in 1819 and is deposited in the Dudley Herbarium at Stanford University. It is apparently a hybrid between <u>V. officinalis</u> L. and <u>V. hastata</u> L., with, in general, intermediate characters. It is named in honor of Dr. Liberty Hyde Bailey, distinguished

worker on cultivated plants, sedges, and palms.

VERBENA CONCEPCIONIS Moldenke, sp. nov.

Herba; ramis gracilibus hirsutulis; foliis oppositis vel suboppositis sessilibus; laminis chartaceis, ad apicem acutis, ad basin longe cuneatis, irregulariter 3-lobatis, lobis 3-dentatis supra rugoso-strigosis subtus strigoso-pubescent-

ibus; spicis multifloris densis dein valde elongatis.

Herb, to about 40 cm. tall; stems erect, branched to the base, sparingly hirsute with stiff white hairs about 1 mm. long and standing at right angles to the stem; branches slender, each terminating, like the stem, in a single elongated spike, hirsutulous, less so in age; principal internodes 2--6.5 cm. long; leaves decussate-opposite, or the upper ones subopposite (like the branches), sessile; blades chartaceous, uniformly light-green on both surfaces, 2--2.8 cm. long, 10--21 mm. wide, widest at about the middle or slightly below, abruptly acute at the apex, long-cuneate at the base, irregularly 3-lobed, each lobe about 3-dentate with coarse subacute teeth, rough and strigose above, strigose-pubescent beneath, the venation somewhat impressed above and prominulous beneath; peduncles slender, continuous with the stems or branches, 2--6 cm. long, sparsely hirsut-

ulous like the stems and branches; spikes many-flowered, at first dense, later elongating to 12 cm., with the fruits rather distant toward the base, more crowded toward the apex and foliaceous bracts often subtending the lower pairs of fruits; bractlets narrow-lanceolate, about 3 mm. long, strigillose-hirsutulous, sharply attenuate-acute at the apex, almost equaling the fruiting-calyx; rachis short-pubescent and somewhat glandular; calyx about 3 mm. long, strigose with rather long white hairs and often also somewhat glandular-puberulent; corolla-tube about 5 mm. long, puberulent outside above the calyx, its limb about 2 mm. wide; fruiting-calyx not accrescent, strigose and somewhat glandular-puberulent.

The type of this species was collected by Louis Née (no. 57) at Concepcion, Chile, between 1789 and 1791, and is deposited in the herbarium of the Jardin Botanico at Madrid.

VERBENA JORDANENSIS Moldenke, sp. nov.

Herba perennis brachiatis; ramis obtuse tetragonis densiuscule patenteque pubescentibus brunneis; foliis oppositis subsessilibus; petiolis alatis; laminis ovatis tripartitis, partibus lobatis vel incisis, lobis angustis obtusis supra asperulo-strigillosis subtus in reticulo venularum patenti-pilosulis subrevolutis; inflorescentiis axillaribus racemosis paucifloris.

Ferennial herb, about 16 cm. tall, abundantly branched from the base, bushy; branches decussate-opposite, obtusely tetragonal, rather densely spreading-pubescent, brown when dry; principal internodes 1--2 cm. long; leaves decussateopposite, subsessile; petioles 1 mm. long or less, winged; blades ovate, tripartite, 7--25 mm. long, 5--15 mm. wide, each of the 3 divisions again lobed or incised, the lobes narrow and obtuse, more or less asperulous-strigillose above, spreading pilosulous on the venetion and margins beneath, the margins subrevolute; midrib and secondaries subimpressed above, prominulous beneath; inflorescence axillary, racemose, the racemes few-flowered, 1--2 cm. long in fruit, usually less than 1 cm. long at anthesis; peduncles filiform, obsolete in anthesis, to 1 cm. long in fruit, and spreading-pubescent like the branches; bractlets ovate, about 3 mm. long, 1 mm. wide at the base, attenuate to the sharply acute apex, rather irregularly long-ciliate along the margins, especially toward the base, reflexed in age; calyx tubular, about 4 mm. long, 5-costate, very shortly 5apiculate on the rim, the costae spreading-pubescent, otherwise glabrate, the apiculations coherent after anthesis; corolla hypocrateriform, its tube narrow-cylindric, about 4 mm. long, the limb about 2 mm. wide, glabrous, irregularly 5-lobed; ovary subtended by a cupuliform disk about 1 mm.

in diameter, which remains in the axil of the bractlet after the fruiting-calyx and fruit have been shed; fruiting-calyx not enlarged, readily splitting when the fruit matures, the apiculations remaining coherent almost up to the time of shedding of the fruit; nutlets narrowly oblong, about 2 mm. long, reticulate-scrobiculate on the back on the upper half, with parallel longitudinal ridges on the lower half, glabrous. shiny.

The type of this most interesting and distinct species was collected by José Eugenio Leite (no. 3474) in wet places and fields, Campos do Jordeo, at al elevation of 1600 m., São Paulo, Brazil, in April, 1945, and is deposited in his herbarium. The conspicuous disks beneath the ovary, which remain in the axils of the reflexed bractlets after the fruiting-calyx and fruit have been shed, render this species most remarkable and show its relationship to V. thymoides Cham.

VERBENA MARITIMA Small (Fig. 2)

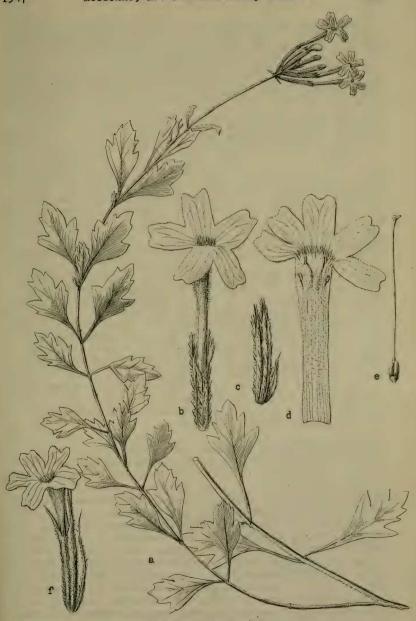
Literature: Small, Bull. N. Y. Bot. Gard. 3: 436. 1905; Moldenke, Annot. List 108. 1939; Prelim. Alph. List Invalid Names 26. 1940; Known Geogr. Distrib. Verbenac. 5 & 101. 1942; Alph. List Invalid Names 25. 1942; Addisonia 21: 59-60, pl. 702. 1942.

Synonyms: Glandularia maritima Small, Man. Southeast. Fl. 1138. 1933. Verbena Aubletia var. maritima Curtiss ex Mol-

denke, Addisonia 21: 60, in syn. 1942.

This species is usually considered to be a rare species by most herbarium curators because of its very limited distribution and the general paucity of material representing it in their collections. However, much splendid collecting in Florida over the past 30 years has brought to light so much material of Verbena maritima and it grows there in such profusion that it cannot really be considered to be a little known plant any more. Following is a list of the material of this species which has come to me recently during the course of my monographic studies of the group. Harris has reported it also from Martin and Monroe Counties.

FLORIDA: Brevard Co.: F. S. Blanton 6309 (I, N), 6479
(I); A. B. Burgess 638 (N); Curtiss 1963* (Bc, C, Cm, I, Up, Vt), 5706 (Al, Ec, Fl, Io, N, N, Fo, Ur), s.n. [Fla.] (C); Degener s.n. [Tropic, Aug. 15, 1933] (Ba); N. Hotchkiss s.n. [Feb. 5, 1935] (N); McFarlin 6608 (N); H. N. Moldenke 219a (N, Up, Ur); O'Neill s.n. [June 11, 1929] (I), s.n. [July 8, 1929] (I), s.n. [south of Cocoa Beach, August 9, 1929] (Fl, I); W. H. Rhoades s.n. [Cocoa, 12-8-27] (Fl); U. C. Smith s.n. [Georgiania, Jany. 31, '91] (Up). Broward Co.: C. C. Deam 60837 (Dm, N). Collier Co.: Sheenan s.n. [Leaning Oak] (N), s.n. [Godden's Mission, March 7, 1919] (N). Dade Co.: Bailey



Verbena maritima Small Fig. 2

& Bailey 6278 (Ba, Ba), 6388 (Ba); N. L. Britton 220 (N), 296 (N); Buswell s.n. [April 3, 1942] (Bu); C. C. Deam 60417 (Dm, N), 60940 (Dm, N); A. P. Garber s.n. [Miami, May 1877] (Vt); Hawkins s.n. [Royal Falm State Fark, 1-25-28] (F1); Henderson s.n. [Cape Florida] (T); Herb. Columbia Univ. s.n. [Cape Florida] (C); Hunnewell 5835 (Ua); Lightfoot s.n. [Key Biscayne, Apr. 28, 1917] (Ba); B. McAllister 27 (H); H. N. Moldenke 549 (Go, N, Up, Ur), 586 (Go, H, N, N, Up, Ur); Mulvania 12 (Hp); O'Neill 7596 (Bt, Du, Hp, Hp, I, N, N, St, Ur), s.n. [Jan. 30, 1935] (T); B. H. Patterson s.n. [Feb. 7, 1918] (Cm, Cm); J. K. Small 2100 (N), 8123 (N), 8594 (N), 8599 (N), s.n. [beach opposite Miami, November 1904] (Ur); Small & Carter 1077 (N-type, N-isotype), 2994 (N), s.n. [January 16, 1909] (We); Small, Carter, & Small 3311 (N), s.n. [July 9, 1915] (N); Small & Wilson 1961 (N); Weber & Hawkins s.n. [Homestead, 3-1-28] (F1). Flagler Co.: O'Neill s.n. [August 7, 1929] (I); West & Arnold s.n. [Flagler Beach, 10/10/40] (F1). Indian River Co.: Small, DeWinkeler, & Mosier 11123 (N), s.n. [April 3, 1924] (It, Mi). Lee Co.: J. K. Small 8347 (N). Palm Beach Co.: Bailey & Bailey 6523 (Ba, Ba); A. B. Burgess 783 (N); W. H. Rhoades s.n. [near Falm Beach] (Hs, Hs); J. K. Small 2124 (N), 8509 (Go, Io, It, N); Small, Mosier, & DeWinkeler 10891 (Up); E. West s.n. [Jupiter, 5-12-33] (F1). Saint Lucie Co.: A. B. Burgess 713 (N). Volusia Co.: B. H. Fatterson s.n. [Daytona, Nov. 28, 1917] (Cm); J. K. Small 8674 (N); Small & DeWinkeler 9856 (Mi). County undetermined: Herb. Le Roy s.n. [Florida] (C).

Explanation of Figure 2: a, Habit, x 3/4; b, flower, x 2 1/4; c, calyx and its subtending bractlet, x 2 1/4; d, corolla slit open and flattened out, x 2 1/4; e, pistil, x 2

1/4; f, immature flower, abnormal.

VERBENA MATRITENSIS Moldenke, hybr. nov.

Herba; caulibus tetragonis densiuscule hirsutulis, pilis albidis rigidis patentibus; foliis lanceolatis leviter chartaceis argute acutis, ad basin cuneato-acuminatis, irregulariter dentatis vel inciso-dentatis supra strigoso-scabris, subtus strigilloso-scabrellis; inflorescentiis paniculatis.

Apparently a natural or artificial hybrid between V. carclina L. and V. hastata L., exhibiting more or less intermediate characters; stems tetragonal, rather densely hirsutulous with whitish, stiff, spreading hairs; leaves lanceolate, thin-chartaceous, 4.5--7 cm. long, 1.4--2.4 cm. wide,
sharply acute at the apex, cuneate-acuminate at the base,
irregularly dentate or incised-dentate along the margins
from almost the base to the apex, strigose-scabrous above,
strigillose-scabrellous beneath; inflorescence paniculate,
or l or 2 spikes terminating short lateral branches; spikes

narrow, elongate, to about 7 cm. long, rather densely flowered, apparently not setting seed, the short peduncles and slender rachis puberulent with appressed gray hair; bractlets lanceolate, about 2 mm. long, acuminate, glabrate on the back, sparsely ciliclate along the margins at the widest part; celyx strigillose, slightly exceeding the subtending bractlets; corolla-tube about 4 mm. long, its limb about 2 mm. wide.

The type of this hybrid was collected in the Royal Botanic Garden at Madrid, Spain, and is deposited in the Britton Herbarium at the New York Botanical Garden.

VERBENA NEEI Moldenke, sp. nov.

Herba parva; caulibus gracilibus decumbentibus vel adscendentibus apicem versus brachiatis breviter pubescentibus, pilis albis rigidis; ramis brevibus; foliis oppositis sessilibus; laminis crasso-chartaceis irregulariter incisolobatis revolutis utrinque strigoso-pubescentibus, ad basin longe cuneatis, lobis acutis; spicis sessilibus vel subsessilibus laxiuscule multifloris.

Herb, to about 20 cm. tall; stems slender, rather harshly short-pubescent with stiff white hairs about 0.5 mm. long. apparently decumbent or ascending, several issuing from the base of the plant, branched toward the apex; branches short, terminating (like the stem) in an elongated spike; leaves decussate-opposite, sessile; blades thick-chartaceous, 1--2 cm. long, 5--12 mm. wide, widest at or below the middle. irregularly incised-lobed, the margins revolute, strigose-pubescent on both surfaces, long-cuneate at the base, the lobes acute; spikes sessile or subsessile, to 10 cm. long, rather loosely many-flowered, usually about 3 spikes at the apex of the stem, the flowers densely crowded in bud, barely imbricate in fruit; bractlets lanceolate, about 2.5 mm. long, acuminate at the apex, strigillose on the back, somewhat shorter than the fruiting-calyx; calyx about 2.5 mm. long, densely strigose; corolla slightly exserted; fruiting-calyx about 3 mm. long, densely strigose.

The type of this species was collected by Louis Née (no. 108) -- in whose honor it is named -- on the pampas at Buenos Aires, Argentina, between 1789 and 1791, and is deposited in the herbarium of the Jardin Botanico at Madrid.

X VIOLA MILLERI Moldenke, nom. nov.

Viola affinis x triloba Brainerd, Vermont Agr. Exp. Sta. Bull. 239: 44--45. 1924; Moldenke, List Observ. Fl. Watchung 24. 1940.

VIORNA PSEUDOCOCCINEA (Schneid.) Moldenke, comb. nov. Clematis pseudococcinea Schneid., Wien Ill. Gartenz. 29: 15. 1904; Ill. Handb. Laubholzk. 1: 279. 1904.

WEIGELTIA SCHLIMII var. INTERMEDIA Moldenke, var. nov.

Hacc varietas a forma typica speciei recedit inflorescentiis Q sessilibus vel subsessilibus, floribus δ 5 mm. longis, petalis 2 mm. latis, antheribus 1 mm. longis glabris, filamentis 1 mm. longis, et fructibus ca. 1 cm. in diametro.

This variety differs from the typical form of the species in having sessile or subsessile pistillate inflorescences (observed in fruit) and slightly larger flowers (observed in burd only), the petals being about 5 mm. long and 2 mm. wide, the glabrous anthers as long as the filaments, each about 1 mm. long, and the fruit about 1 cm. in diameter, smooth, very wrinkled in drying. In the typical form of the species the pistillate inflorescences (in fruit) have a peduncle about 5.5 cm. long, the petals are only 4 mm. long and 1 mm. wide, the filaments are about 2 mm. long, and the anthers are very small, about 0.25 mm. long, pilose at the base, while the fruit is only about 7 mm. in diameter, pustulate, not wrinkled. In W. multiflora A. C. Sm. the pistillate inflorescences are not known, but the staminate flowers have their petals 3.5--5 mm. long and 1.9--2.5 mm. wide, the anthers about 1 mm. long and the filaments about 2 mm. long, and the leaves are relatively much narrower and differ markedly in the details of their venation.

The type of this variety was collected by José Cuatrecasas (no. 17312) at San Isidro, altitude 5--100 m., Río Cajambre, on the Pacific coast, El Valle, Colombia, between May 2 and 5, 1944, and is deposited in the Britton Herbarium at

the New York Botanical Garden,

ADDITIONAL NOTES ON THE GENUS TIMOTOCIA. I

Harold N. Moldenke

Since the publication of my monograph of this genus in Fedde, Repert. Sp. Nov. 39: 129--153 (1936) seventy-nine additional specimens and photographs of specimens have been examined. The small number of specimens that have come to light in these eleven years is a good indication of the scarcity of material of this genus in the world's herbaria and the rarity of the members of the group. The material hereinafter cited is deposited in the herbaria indicated by the following symbols: B = Botanisches Museum, Berlin; Br = Jardin Botanique de l'Etat, Brussels; Cb = Delessert Herbar-